

DRILL HOLES

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BORDER REV: DATE: June 1, 2004

PROJECT DESCRIPTION

I. GENERAL

This project involves the modification of an existing Traffic Control Signal with interconnect at the intersection of US 1 and Laurel Mall Entrance / Commercial Driveway in Prince George's County. The reconstruction is due to a traffic accident. One strain pole with associated signal equipment shall be replaced. US 1 is assumed to run an north-south direction.

II. INTERSECTION OPERATION

- The intersection shall continue to operate in a NEMA five-phase, semi-actuated mode, with the US 1 approaches running concurrently. An Exclusive/Permissive left turn phase shall remain in operation for northbound approach of US 1. The pedestrian phase with pushbutton actuation shall remain in operation across the south leg of US 1. The Laurel Mall Entrance / Commercial Driveway shall also continue to run concurrently.
- The existing full-traffic-actuated, eight-phase controller with all necessary equipment housed in a NEMA size "6" base-mounted cabinet shall be utilized at this intersection.

III. SPECIAL NOTES

- The Contractor shall be responsible for terminating all signal cables, to the appropriate terminals and shall properly label each cable.
- All controller cabinet wiring will be performed by the S.H.A. Signal Shop. Contact Mr. Ed Rodenhizer at (410) 787-7650 seventy-two hours in advance of intended work.
- All underground and overhead utilities shown on these plans are schematic only and may not be complete. The Contractor shall be responsible for notifying Miss Utility prior to construction so that all utilities may be located in the field. If the Contractor perceives that a conflict between the utilities and the traffic signal will occur, the Contractor shall notify the Project Engineer immediately so that the conflict may be resolved.

The contact persons for District #3 (Prince George's County) are as follows:

Mr. Majid Shakib Assistant District Engineer - Traffic Phone: (301) 513-7358	Mr. Ed Rodenhizer Signal Shop 410-787-7652
Mr. Wayne Mowdy Assistant District Engineer - Maintenance Phone: (301) 513-7304	Sonny Bailey Sign Shop 410-787-7670
Mr. Augie Rebish Assistant District Engineer - Utility Phone: (301) 513-7350	
Mr. Richard L. Daff, Sr. Chief, Traffic Operations Division Phone: (410) 787-7630	

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A..

THERE IS NO EQUIPMENT TO BE SUPPLIED BY THE SHA.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	QUANTITY
1001	Maintenance of traffic per assignment.	1 EA
2002	Test pit excavation	1 C.Y.
8001	Furnish and install concrete for signal foundation.	5 C.Y.
8020	Remove & dispose of equipment (per assignment). (includes removal of temporary back guys).	1 EA
8030	Furnish and install No. 6 AWG stranded bare copper ground wire.	15 L.F.
8034	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - bored.	15 L.F.
8036	Furnish and install 3" schedule 80 rigid polyvinyl chloride conduit - trenched.	10 L.F.
8050	Furnish and install electrical handhole	1 EA
8059	Furnish and install ground rod - 3/4" dia. x 10' length	1 EA
8064	Furnish and install 2 conductor electrical cable (alum. shielded)	455 L.F.
8065	Furnish and install electrical cable - 2 conductor (No. 14 AWG).	330 L.F.

EQUIPMENT LIST (CONT.)

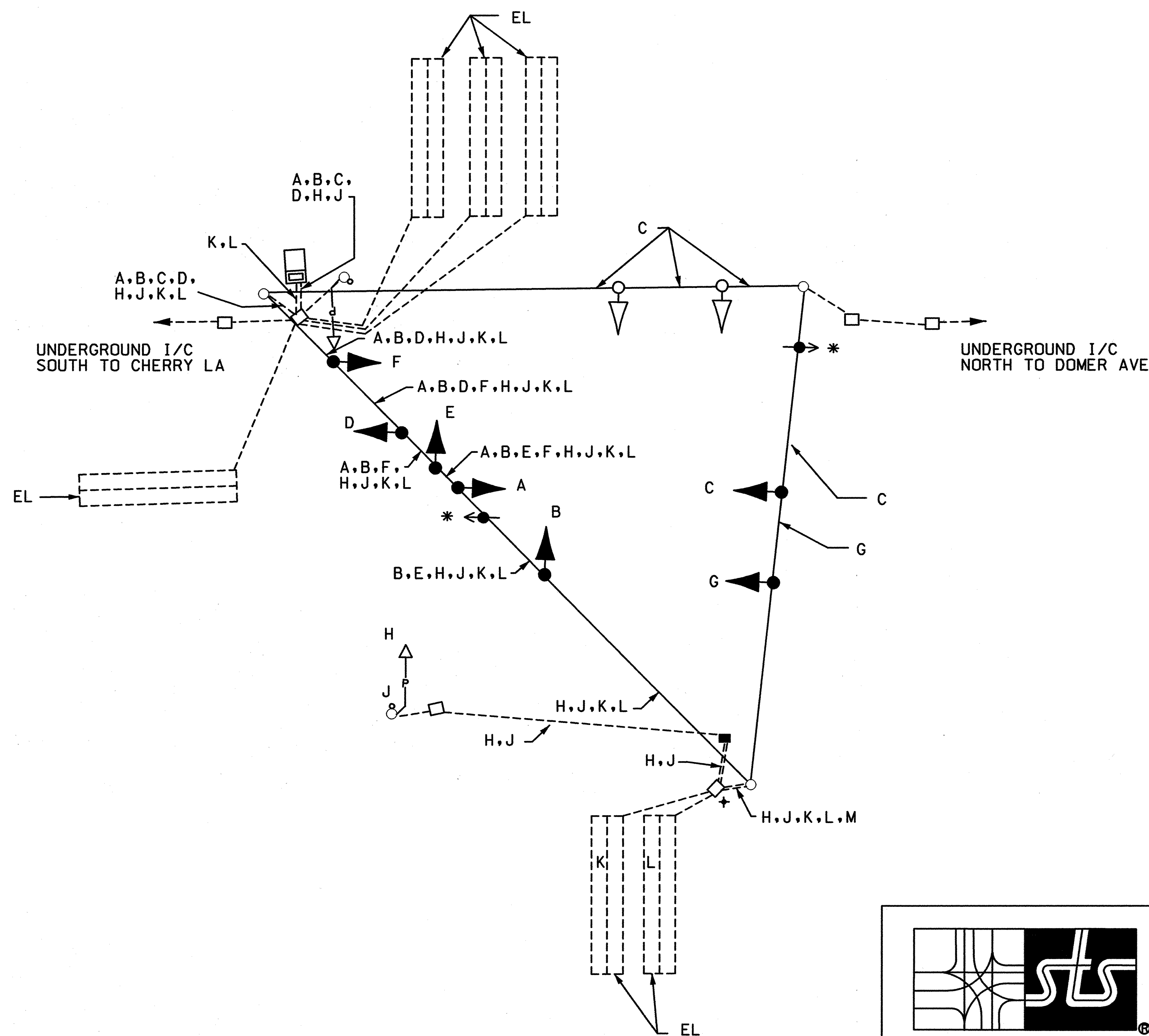
B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

ITEM NO.	DESCRIPTION	QUANTITY
8067	Furnish and install electrical cable - 5 conductor (No. 14 AWG).	455 L.F.
8068	Furnish and install electrical cable - 7 conductor (No. 14 AWG).	545 L.F.
8074	Furnish and install steel span wire - 3/4" dia.	250 L.F.
8075	Furnish and install steel span wire - 3/4" dia.	250 L.F.
8080	Furnish and install 12" vehicular LED signal head section. (BLACK FACED)	22 EA
8081	Furnish and install 8" vehicular LED signal head section. (BLACK FACED)	3 EA
8085	Back guy tender	2 EA
9063	12" x 32' steel strain pole (2 1/2" x 72" anchor bolts included)	1 EA
9090	Sheet aluminum signs to consist of:	22.5 SF
	R3-5R "RIGHT TURN ONLY" sign, (30" x 36") span wire mounted.	1 EA
	R3-5L "LEFT TURN ONLY" sign, (30" x 36") span wire mounted.	1 EA
	R3-6 "LEFT TURN AND THRU" sign, (30" x 6") span wire mounted.	1 EA
	Relocate opticom detector eye.	2 EA

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11
PHASE 1 & 6	<G-G	<G-G	G	R	R	R	R	R	R	DW	DW
1 CHANGE	<Y-G	<Y-G	G	R	R	R	R	R	R	DW	DW
PHASE 2 & 6	G	G	G	G	R	R	R	R	R	DW	DW
2 & 6 CHANGE	Y	Y	Y	Y	R	R	R	R	R	DW	DW
PHASE 4 & 8	R	R	R	R	R	G	G	G	G	DW	DW
4 & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW
PHASE 4 ALT. & 8	R	R	R	R	R	G	G	G	G	WK	WK
PED CLEAR	R	R	R	R	R	G	G	G	G	FL/DW	FL/DW
4 ALT. & 8 CHANGE	R	R	R	R	R	Y	Y	Y	Y	DW	DW
PRE-EMPTION	G	G	G	G	R	R	R	R	R	DW	DW
CHANGE	Y	Y	Y	Y	R	R	R	R	R	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	DARK	DARK

WIRING DIAGRAM



WIRING KEY

A, B, C, D } 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
E, F, G, H } 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
J } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
K } 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
L } ALUMINUM SHIELDED
M - STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
EL - LOOP WIRE (NO. 14 A.W.G.) EXISTING
* - USE EXISTING OPTICOM CABLE
+ - GROUND ROD

SHA

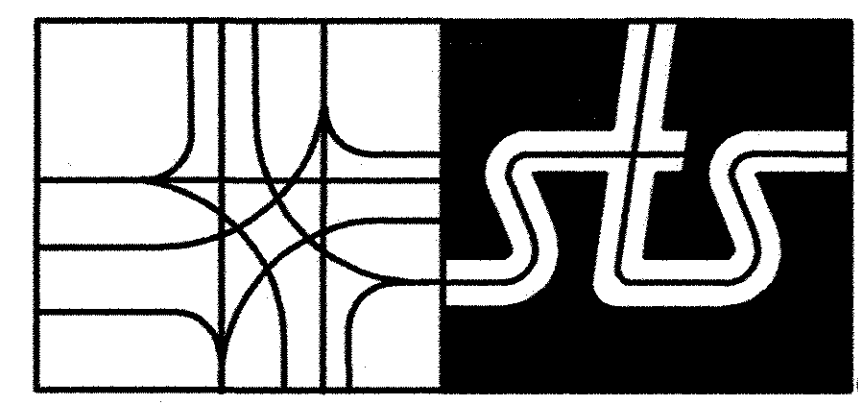
STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

US 1 AND LAUREL MALL ENTRANCE

SCALE NONE DATE 7-28-05 CONTRACT NO.

DESIGNED BY COUNTY PRINCE GEORGE'S CO.
DRAWN BY LOGMILE 16000113.00
CHECKED BY TMS NO.
F.A.P. NO. TOD NO.

TS NO. 1629E DRAWING NO. OF SHEET NO. 2 OF 2



STREET TRAFFIC STUDIES, LTD.

400 Crain Hwy., NW
Glen Burnie, MD 21061

PH (410) 590-5500
FAX (410) 590-6537

491761.dgn

PLOTTED: 8/24/2005
FILE: 8/24/2005